17

Claims

 A system (1) for operating and monitoring a production process (PP), said system having

- 5 first means (2) for provisioning process information data (PI) acquired from automation devices or, as the case may be, systems and/or diagnostic devices or, as the case may be, systems and/or further devices (5),
- a device (3) for editing and/or representing the acquired 10 process information data for at least one user of the system (1), and
  - a historian database (4) for filing the acquired process information data (PI) for evaluating and/or representing the filed process information data (PI).

15

20

- 2. The system as claimed in claim 1, characterized in that the system (1) is provided for coupling to the automation devices or, as the case may be, systems and/or diagnostic devices or, as the case may be, systems and/or further devices (5) via a data transmission device (6).
  - 3. The system as claimed in claim 1 or 2, characterized in that
- 25 the system (1) has second means (7) for generating alarms and/or events.
  - 4. The system as claimed in one of claims 1 to 3, characterized in that
- 30 the system (1) has at least one interface (8) for communicating with at least one client (9).
  - 5. The system as claimed in claim 4, characterized in that
- 35 the client (9) is provided as a web client (9a) for communicating over the internet and/or an intranet (10).
  - 6. The system as claimed in claim 5,

18

characterized in that a browser is provided as the web client (9a).

- The system as claimed in one of claims 4 to 6,
   characterized in that
   the clients (9) and/or the web clients (9a) are embodied as
   SCADA clients of the system (1) for operating and monitoring.
- 8. The system as claimed in one of claims 4 to 6,
  10 characterized in that
  the clients (9) and/or the web clients (9a) are embodied as
  clients (99, 99a) that are independent of the system (1) for
  operating and monitoring.
- 9. The system as claimed in claim 8, characterized in that the independent clients (99, 99a) are embodied as historian clients having analyzing and/or statistical and/or graphical functionality for evaluating and/or representing the filed process information data (PI).
- 10. The system as claimed in claim 8, characterized in that the functionality of the independent clients (99, 99a) is integrated in the SCADA clients of the system (1) for operating and monitoring.
  - 11. The system as claimed in claim 8, characterized in that the functionality of the SCADA clients is integrated in the
- 30 the functionality of the SCADA clients is integrated in the independent clients.
- 12. The system as claimed in claim 8, characterized in that 35 the functionality of the clients (9,9a,99,99a) is integrated in standard applications, in particular in office applications.

19

13. The system as claimed in one of the preceding claims, characterized in that the database (4) is provided for fast and/or central filing of the acquired process information data.

5

- 14. The system as claimed in claim 13, characterized in that the database (4) is embodied as a relational database.
- 10 15. The system as claimed in claims 13 or 14, characterized in that access to the database (4) is provided by means of SQL queries via standard interfaces.
- 15 16. The system as claimed in one of the preceding claims, characterized in that the process information data (PI) filed in the database (4) is provided for accessing by clients (9,9a,99,99a) communicating with the system (1).

20

17. The system as claimed in claim 16, characterized in that Remoting of the standard interfaces of the database (4) is provided.

25

18. The system as claimed in one of the preceding claims, characterized in that the system (1) and the clients (9, 9a, 99, 99a) are provided for bi-directional web communication.

30

- 19. The system as claimed in one of the preceding claims, characterized in that the clients (9,9a,99,99a) are provided for entering specifications and/or should-be values for controlling the production process.
- 20. The system as claimed in one of the preceding claims, characterized in that

20

the system (1) for operating and monitoring is provided for managing users of the system (1) and/or for planning process communication and/or a security system.

- 5 21. The system as claimed in one of the preceding claims, characterized in that the system (1) for operating and monitoring is of redundant design, with redundancy also existing for independent clients.
- 10 22. The system as claimed in one of the preceding claims, characterized in that at least one multiplexer component (11) is provided for concealing the redundancy and/or a plurality of data servers.
- 23. A database (4) for filing acquired process information data (PI) for evaluating and/or representing the filed process information data (PI), with the database (4) being provided for integration in a system (1) for operating and monitoring of a production process (PP) as claimed in one of claims 1 to 20 19.
  - 24. A computer program product for operating and monitoring a production process (PP) by means of a system (1) as claimed in one of claims 1 to 19.